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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,141	06/15/2001	Shuji Takana	1422-0480P	6016

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EXAMINER	
DOUYON, LORNA M	
ART UNIT	**PAPER NUMBER**
1751	

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/868,141	TAKANA ET AL.	
	Examiner	Art Unit	
	Lorna M. Douyon	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *RCE filed April 19, 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-14 and 16-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 8-14, 16-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 June 2001* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 19, 2004 has been entered.

Abstract

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

It is suggested that the abstract be limited to a single paragraph (please note the previous amendment to the abstract only amended the first paragraph) within the range of 50 to 150 words, and that the phrase "the present invention relates to" in the first line of the paragraph be deleted.

3. Claims 1-6, 8-14, 16-18 are pending.

4. The rejection of claims 1-6, 8-14, 16-18 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Emery et al. (US Patent No. 6,191,095), hereinafter "Emery" is withdrawn in view of applicants' amendment.

Claim Objections

5. Claims 3 and 4 are objected to because of the following informalities:

In claim 3, line 4, "particles" should be replaced with "particle".

In claim 4, line 3, "exists" before "a hollow" is misspelled.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 9-14 and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Atkinson et al. (US Patent No. 4,900,466), hereinafter "Atkinson".

Atkinson teaches powders prepared by spray drying and suitable for use as detergent powders or components thereof and contain sodium carbonate and/or sodium carbonate/sodium sulphate double salt Burkeite modified with a low level of an organic polycarboxylate (see abstract). In Example 12, Atkinson teaches a spray-dried crystal-growth-modified Burkeite having a bulk density of 550 g/l and comprising 67.0 wt% sodium sulphate (MW=142), 25.0 wt% sodium carbonate (MW=106), 1.5 wt% sodium polyacrylate (molecular weight 25,000), 3.0 wt% sodium silicate (MW=122) and 1.0 wt% nonionic surfactant (Synperonic A7) (see col. 14, lines 22-52), wherein the molar ratio of sodium sulphate (67/142=0.47) + sodium polyacrylate (1.5/25,000=0.00006) + sodium silicate (3/122=0.02) to sodium carbonate (25/106=0.24) is about 7:3. Even though Atkinson does not explicitly disclose the dissolution rate, microporous capacity, capability of releasing a bubble and a localized structure as those recited, it would be inherent in the composition of Atkinson to have the characteristics as those recited because same composition having the same components have been utilized. Hence, Atkinson anticipates the claims.

9. Claims 9-14 and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Grecsek et al. (GB 2,097,419), hereinafter "Grecsek".

Grecsek teaches base beads for the manufacture of detergent compositions which comprises 23.37% sodium carbonate (MW=106), 16.60% sodium bicarbonate (MW=84), 34.74 zeolite 4A, 13.64% sodium silicate (Na_2O:SiO_2 ratio of 1:2.4) (MW=206) and 1.29% sodium polyacrylate of molecular weight in the range of 1,000 to 2,000, wherein the molar ratio of sodium carbonate (23.37/106=0.22) + sodium silicate (13.64/206=0.07) + sodium polyacrylate (1.29/2,000=0.0006) to sodium bicarbonate (16.60/84=0.20) is 1.45:1 or 6:4 or 3:2 and wherein the inorganic base beads resulting were of a bulk density of about 0.6 to 0.7 g/ml and of particle size range substantially between 10 and 100 mesh, U.S. Sieve Series (see (Example 3A and 3B on pages 11-12). Even though Grecsek does not explicitly disclose the dissolution rate, microporous capacity, capability of releasing a bubble and a localized structure as those recited, it would be inherent in the composition of Grecsek to have the characteristics as those recited because same composition having the same components have been utilized. Hence, Grecsek anticipates the claims.

10. Claims 1-6, 8-14, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emery et al. (US Patent No. 6,191,095), hereinafter "Emery".

Emery teaches a particulate detergent composition having a bulk density of 700 g/l or less and containing at least 10 wt% of organic detergent surfactant comprises a base powder composed of at least two granular components (see abstract). In Example 1, Emery teaches a detergent composition comprising 31.8 wt% B1 builder granules and 53.4 wt% N1 nonionic surfactant granules, wherein B1 is spray-dried having a bulk density of 550 g/l and comprises 76.2 wt% STP (sodium tripolyphosphate), 10.6 wt% sodium silicate and 2.2 wt% sodium linear

alkyl benzene sulfonate surfactant, and wherein N1 granules have a bulk density of 501 g/l and comprises 28.7 wt% Synperonic A7 nonionic surfactant (see col. 9, lines 25-50; col. 10, line 65 to col. 12, line 26). Emery also teaches organic builders that may additionally be present in the builder granules like polycarboxylate polymers such as polyacrylates and acrylic/maleic copolymers (see col. 7, lines 23-37; Component B3 in the Table under col. 9). The base powder preferably comprises granules having an average particle size of greater than 200 micrometers (see col. 2, lines 54-55). Emery, however, fails to specifically disclose builder granules wherein one of the two or more water-soluble substances include water-soluble polymers, the dissolution rate, microporous capacity, capability of releasing a bubble and a localized structure as those recited.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate polycarboxylate polymers in the builder granules because this is one of the builders that may additionally be present in the builder granules as taught by Emery. Even though Emery does not explicitly disclose the dissolution rate, microporous capacity, capability of releasing a bubble and a localized structure as those recited, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the composition of Emery to exhibit similar characteristics as those recited because similar composition having similar two granular components have been utilized.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 9-14 and 17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 5, 7, 9, 11, 15 and 17 of U.S. Patent No. 6,376,453. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to the similar detergent particles having similar properties differing only in the present claims require a molar ratio for the two or more kinds of water-soluble substances. US '453, however, teaches the proportions of the water soluble polymer and water-soluble salt, hence, it would have been obvious to one of ordinary skill in the art to optimize each of the proportions of the water-soluble salts.

13. Claims 9-14 and 17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2 and 16 of U.S. Patent No. 6,645,931. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to the similar detergent particles having similar properties differing only in the present claims require a molar ratio for the two or more kinds of water-soluble substances. US '931, however, teaches the proportions of the water soluble polymer and

water-soluble salt, hence, it would have been obvious to one of ordinary skill in the art to optimize each of the proportions of the water-soluble salts.

14. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. The references are considered cumulative to or less material than those discussed above.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lorna M. Douyon
Primary Examiner
Art Unit 1751